

Power Solid-State Relais PSSR 24VDC/1PH AC 25A

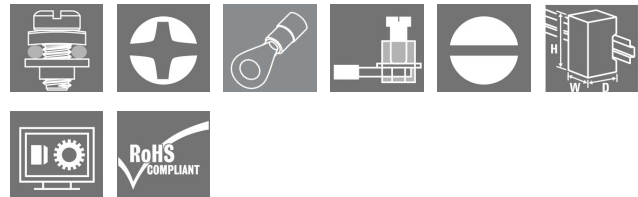
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Product image



Similar to illustration

- Load circuit: single-phase 12...275 VAC / 25 A or 24...600 VAC / 35 A
- No-voltage switching
- Ready-to-use: snap on - connect - ready
- Wear-free and silent switching
- High capacity for handling surge currents (I^2t) up to 6000 A²s (10 ms)
- Plug-in monitoring module



General ordering data

Type	PSSR 24VDC/1PH AC 25A
Order No.	1406200000
Version	Power Solid-State Relais, Solid state contactor, 1 NO contact (Triac (zero-cross switch)), Rated control voltage: 3.5...32 V DC , Rated switching voltage: 12...275 V AC, Continuous current: 17 A (AC51) at 40 °C, 3.5 A (AC 53)
GTIN (EAN)	4050118206821
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Width	22.5 mm	Width (inches)	0.886 inch
Height	98 mm	Height (inches)	3.858 inch
Depth	115.9 mm	Depth (inches)	4.563 inch
Net weight	244 g		

Temperatures

Humidity	40...85 % (indoor) no condensation	Operating temperature, max.	100 °C
Operating temperature, min.	-55 °C	Storage temperature, max.	125 °C
Storage temperature, min.	-55 °C	Operating temperature	-55 °C... 100 °C
Storage temperature	-55 °C... 125 °C		

Environmental Product Compliance

REACH SVHC Lead 7439-92-1

Rated data UL

Certificate No. (cURus) E223474

Control side

Rated control voltage	3.5...32 V DC	Nominal control current	13.4 mA DC ±20 %
Power rating	< 500 mW	Cut-in / dropout voltage	3 V / 2 V DC
Status indicator	LED yellow	Protective circuit	Suppressor diode

Load side

Rated switching voltage	12...275 V AC	Continuous current	17 A (AC51) at 40 °C, 3.5 A (AC 53)
Max. switching current	25 A	Load category	AC 51, AC 53
Inrush current	140 A (10 ms)	Pulse load, max. current	250 A (10 ms), non-recurrent
Load limit integral (I^2t) < 10 ms	340 A ² s	Switch-on delay	≤ 10 ms
Switch-off delay	≤ 10 ms	Voltage drop at max. load	≤ 1.25 V
Leakage current	≤ 1 mA	Min. switching current	5 mA
Short-circuit-proof	No	Protective circuit, load side	Varistor
Output voltage frequency range	50...60 Hz	max. switching frequency (DC control voltage)	10 Hz

Contact data

Contact type 1 NO contact (Triac (zero-cross switch))

General data

Version	Single-phase with mounted heat sink (zero-voltage switch output)	Rail	TS 35
Colour code	black		

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Technical data**Insulation coordination**

Insulation coordination according to	EN 60947-4-3:2014	Pollution severity	2
Surge voltage category	III	Clearance and creepage distances for control side - load side	≥ 6,5 mm
Dielectric strength for control side - load side	4 kV _{eff}	Dialectric strength of load side - housing	4 kV _{eff}
Impulse withstand voltage	4 kV (1.2/50 µs)	Protection degree	IP20

Further details of approvals / standards

Standards	EN 60947-4-3, EN 60950, IEC 60335-1	Certificate No. (cURus)	E223474
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Connection data (control side)

Wire connection method (control side)	Screw connection	Nom. rated connection clamping range (control side)	1.5 mm ²
Min. rated connection clamping range (control side)	0.13 mm ²	Max. rated connection clamping range (control side)	3.3 mm ²
Min. tightening torque (control side)	0.4 Nm	Max. tightening torque (control side)	0.5 Nm
Blade size (control side)	0.6 x 3.5 mm		

Connection data (load side)

Wire connection method (load side)	Screw connection	Nom. rated connection clamping range (load side)	6 mm ²
Min. rated connection clamping range (load side)	1.5 mm ²	Max. rated connection clamping range (load side)	6 mm ²
Wire connection method (load side)	M5 ring cable lug (insulated)	Min. tightening torque (load side)	2 Nm
Max. tightening torque (load side)	3 Nm	Blade size (load side)	Gr. PZ2

Classifications

ETIM 5.0	EC001437	ETIM 6.0	EC002055
eClass 6.2	27-37-16-01	eClass 7.1	27-37-16-01
eClass 8.1	27-37-16-01	eClass 9.0	27-37-10-14
eClass 9.1	27-37-10-14		

Approvals

Approvals



ROHS

Conform

Downloads

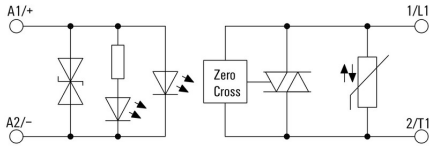
Approval/Certificate/Document of Conformity	DE_PA5600_160620_001.pdf
Brochure/Catalogue	CAT 4.2 ELECTR 18/19 EN
Engineering Data	EPLAN, WSCAD
Engineering Data	STEP
User Documentation	1431780000.pdf

**Power Solid-State Relays
PSSR 24VDC/1PH AC 25A**

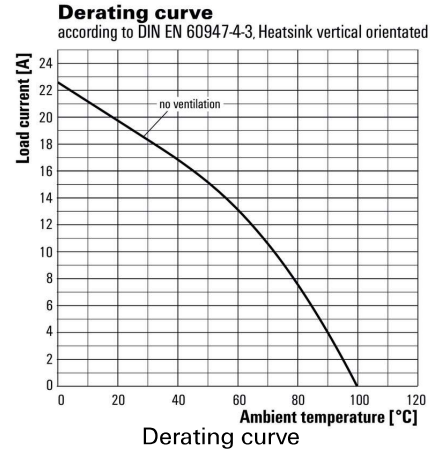
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Drawings

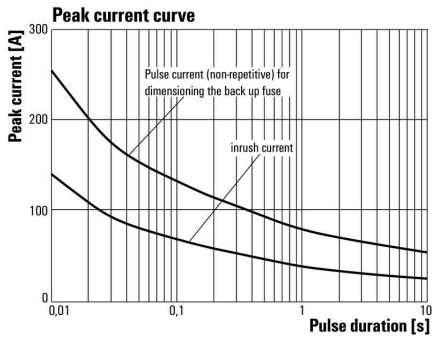
Wiring diagram



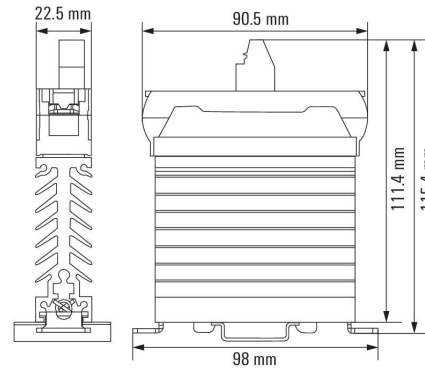
Graph



Graph



Dimensional drawing

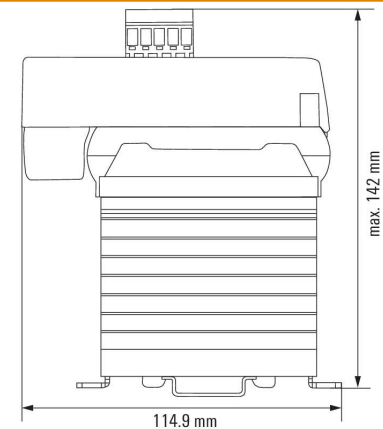


Example of use



Optional plug-in current-monitoring module (item no.: 1406230000)

Dimensional drawing



Dimensions of a 1-phase PSSR with current monitoring module attached

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Accessories**Slotted screwdriver**

VDE insulated screwdriver sets, for working on live parts up to 1000 V AC and 1500 V DC, DIN EN 60900. IEC 900. Each piece is "GS" safety tested. Blade made from fully hardened, high-alloy chromium-vanadium-molybdenum steel, gun-metal finish.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.
SDIS SL 0.6X3.5X100	1274660000	Mounting tool, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm	4050118072631	1 pc(s).

Crosshead screwdriver Pozidriv

VDE insulated crosshead screwdriver type Pozidriv SDIK PZ DIN 7438, ISO 8764/2-PZ, output to ISO 8764-PZ, SoftFinish grip

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.
SDIK PZ2	9008890000	Screwdriver, Blade length: 100 mm	4032248266661	1 pc(s).

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Accessories

Current-monitoring module



- Monitoring of up to 5 consumers connected in parallel
- Monitoring of single failure and short-circuit
- Can be plugged into the single-phase PSSRs with heat sink
- Feedback output for error message
- Teach button on the module and external teach input
- Undercurrent switching threshold: $0.84 \times I_{teach}$

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.
PSSR 1PH CONTROL UNIT	1406230000	Power Solid-State Relais, Current monitoring, Screw connection	4050118206739	1 pc(s).

End bracket



Klippon® Connect with clamping yoke Technology

The high reliability and variety of designs of the terminal blocks with clamping yoke connections make planning easier and optimises operational safety. Klippon® Connect provides a proven response to a range of different requirements.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.
MEW 35/1	1805610000	Accessories, End bracket	4032248287017	10 pc(s).

Crosshead screwdriver, Pozidrive



VDE insulated screwdriver sets, for working on live parts up to 1000 V AC and 1500 V DC, DIN EN 60900, IEC 900. Each piece is "GS" safety tested. Blade made from fully hardened, high-alloy chromium-vanadium-molybdenum steel, gun-metal finish.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.
SDIK PZ2 SL	1274740000	Mounting tool, Blade length: 100 mm	4050118073218	1 pc(s).

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Accessories**Blank**

ESG is the tried-and-tested marker in MultiCard format for use on many well-known electrical devices. The result is high-quality device marking with a high-contrast appearance.

Various types are available for devices from the following manufacturers:

- Siemens
- Télémecanique
- ABB
- Beckhoff
- Lumberg
- Tags for all-purpose usage; self-adhesive or clip-on tags, depending on the type

Advantages at a glance:

- Tags for universal usage, self-adhesive or clip-on tags, depending on type
- For aligned equipment, e.g. circuit breakers, we supply ESG markers for clipping onto tag rails
- Individual laser-quality printing according to specifications

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

Please note that these markers are not intended for printing with the SpeedMarking laser.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.
ESG 6/15	1881280000	ESG, Device markers x 15	4032248482276	200 pc(s).
RIDER MC NE		mm, PA 66, Colour code:		
WS		white, pluggable		

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Accessories

Tools



Tools for removing the sheathing of uncut power cables and outgoing feeders, plus screwdrivers for installing FieldPower components.

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.
SDK PZ2	9008540000	Screwdriver, Blade width (B): 6 mm, Blade length: 100 mm	4032248056538	1 pc(s).
SDS 0.6X3.5X100	9008330000	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm	4032248056286	1 pc(s).

Slotted screwdriver

VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip



General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.
SDIS 0.6X3.5X100	9008390000	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm	4032248056354	1 pc(s).

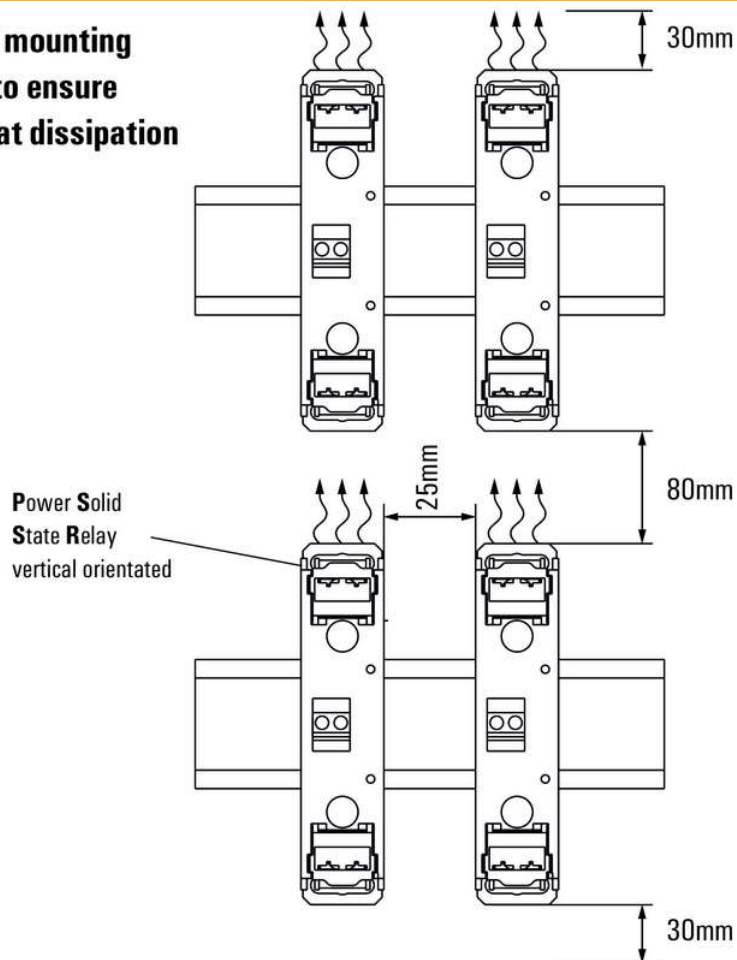
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Drawings

Miscellaneous

**Suggested mounting
distances to ensure
optimal heat dissipation**



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Drawings

Signal characteristics of zero cross switching PSSR

shown at an example with resistive load

